

A NEW SPECIES OF SCHEFFLERA (ARALIACEAE)
FROM THE VENEZUELAN ANDES

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ABSTRACT

A new species of *Schefflera*, ***S. vanderwerffii*** Dorr & Stergios, is described and illustrated. This new species is known only from the Ramal de Guaramacal in the Venezuelan Andes. Similarities and differences with respect to *S. pittieri* and *S. quinquestylorum* are discussed.

KEY WORDS: Araliaceae, *Schefflera*, Venezuela, Andes

RESUMEN

Una nueva especie de *Schefflera*, ***S. vanderwerffii*** Dorr & Stergios, es descrita y ilustrada. Esta nueva especie es conocida únicamente del Ramal de Guaramacal en los Andes venezolanos. Se discuten las afinidades y diferencias con respecto a *S. pittieri* y *S. quinquestylorum*.

PALABRAS CLAVE: Araliaceae, *Schefflera*, Venezuela, Andes

Schefflera J.R. Forst. & G. Forst. (Araliaceae) as it is currently circumscribed is a very large genus comprising ca. 600 described species, but there is ample evidence that the genus is polyphyletic and divisible into at least five clades none of which correspond neatly with previously recognized segregate genera (Plunkett et al. 2005). Molecular data suggest that the Neotropical species of *Schefflera* form a single clade (Fiaschi et al. 2007), which in turn is part of a broader "Asian Palmate clade" (Plunkett et al. 2004, 2005; Wen et al. 2001 as "*Eleutherococcus-Dendropanax-Schefflera* group") that is at present defined more by molecular and geographic than morphological characters.

Schefflera is well represented in Venezuela. Species diversity is greatest in the Venezuelan Guayana where ca. 60 species occur (Frodin 1997, 2008) and relatively low in the Andes, Cordillera de la Costa, and adjacent Llanos. Presently, only five species of *Schefflera* are found in the Venezuelan Andes (Frodin 2008; see also Bono 1996; Dorr et al. 2000; Huber 1977); *S. cuatrecasasiana* Steyerl., *S. jahnii* (Harms) Steyerl., *S. rufa* Frodin, *S. karsteniana* (Marchal) Harms, and *S. tamana* Steyerl. Two of these five (*S. cuatrecasasiana* and *S. tamana*) are localized in their distribution and only one (*S. karsteniana*) could be considered to be widespread. Three species of *Schefflera* are found in the Cordillera de la Costa (Frodin 2008; see also Meier 1998; Steyerl. & Huber 1978); *S. glabrata* (Kunth) Frodin, *S. karsteniana* (Marchal) Harms, and *S. pittieri* Harms. Two of these three have fairly wide distributions, while the third (*S. pittieri*) is known only from a few, adjacent localities in Aragua. (The Mérida record for *S. pittieri* cited by Frodin (2008) is almost certainly an error). The sole species of *Schefflera*, *S. morotoni* (Aubl.) Maguire et al., found in the Venezuelan Llanos also occurs in the Venezuelan Guayana (Frodin 2008; see also Duno de Stefano 2007).

The following new species can be added to the small number of species found in the Venezuelan Andes. We were aware that it was undescribed when we published an enumeration of the vascular plants of Guaramacal National Park (Dorr et al. 2000), but only subsequently did we collect material adequate for the description that follows.

Schefflera vanderwerffii Dorr & Stergios, sp. nov. (**Fig. 1**). TYPE: VENEZUELA. TRUJILLO: Mpio. Boconó, Parque Nacional Guaramacal, road from Boconó to Guaramacal, Laguna de Agua Negra—parte alto [sic] de la Qda. Salvaje (UTM: 1027793 N; 371576 E), 2000–2350 m, 15 Apr 2003 (fr), B. Stergios, L.J. Dorr & R. Caracas 20271 (HOLOTYPE: PORT; ISOTYPES: K, MO, US-2 sheets, VEN).

Schefflera sp. A, Dorr et al., Contr. U.S. Natl. Herb. 40: 66. 2000 [2001].

Species nova a *Schefflera pittieri* inflorescentia congesta et styli 5 differt.

Scandent shrubs or small trees, 3–4 m tall; twigs 5–7 mm in diam., glabrescent; andromonoecious. Leaves digitately compound, (6–)7-foliolate, the leaflets in a single plane, blades narrowly ovate to ovate, chartaceous, margin hyaline and revolute, apex long acuminate, base attenuate to truncate, slightly oblique, sparingly pubescent especially along midrib and secondary veins below, glabrous above; venation brochidodromous, primary vein raised above and below, secondary veins slightly raised below, not noticeably raised above, 8–14 per side, arcuate-ascending. Petioles (10–)16.5–27 cm long, slender, terete, sparingly pubescent when young, glabrescent in age. Stipular ligules 1.8–2.4 cm long, margin entire or sparingly ciliate, apex entire or rarely slightly bifid. Median leaflets: petiolule (3.3–)4.5–7 cm long, blade 12.5–22.5 cm × 4.2–8.2 cm, apical acumen 1.5–2.8 cm long. Basal leaflets: petiolule 1–3.5 cm long, blade (7.5–)12–13.5 × (2.5–)3.7 × 5.7 cm, apical acumen 1.5–3 cm long. Inflorescence appearing subterminal, paniculate, erect, (3–) 4-branched; peduncle up to 7.5 cm long; rachis up to 5 cm long, bracts subtending rachis up to 1 cm long; primary branches 7 to 12, 3.5–5 cm long (in fruit), bract ca. 3 mm long; secondary branches 4 to 6, 1–1.7 cm long (in fruit); ultimate inflorescence units umbellate, often with 1–2 subtending lateral umbellules; each umbellule with 4 to 6 flowers subtended by bracteoles ca. 1 mm long. Pedicels 1–2 mm long (in bud), 3–4 mm long (in fruit), pubescent to hirsute when young, glabrescent in age, not articulate. Flowers bisexual and staminate. Calyx obconic, ca. 1 mm long, with 5 minute teeth; corolla calyptrate, 3–5 × 3–4 mm, pubescent to hirsute, glabrescent in age; stamens 5, filaments ca. 0.25 mm long (in bud); anthers ca. 1.5 mm (in bud), arcuate. Styles 5, free (in bud) or very slightly connate basally (in fruit), strongly diverging in fruit and ca. 2 mm long, stigmatic surface capitate. Fruit strongly 5-ribbed when dried, urceolate, sparingly pubescent to glabrescent; pyrenes (evidently immature) 5, each 1-seeded, ca. 6 × 2.5 mm, flattened.

Distribution and ecology.—*Schefflera vanderwerffii* is known, at present, only from north- and south-facing slopes of the Ramal de Guaramacal in the northeastern corner of Guaramacal National Park where it is found in lower montane or cloud forest; 1700–2350 m.

Etymology.—The specific epithet honors Henk van der Werff of the Missouri Botanical Garden who first collected this species. Early in his career he lived in Falcón and in addition to working on the flora of that state he also made many valuable collections in the Venezuelan Andes.

PARATYPES. **VENEZUELA. Portuguesa:** Mpio. Sucre, La Divisoria de la Concepción, 9°18'N, 70°06'W, 1700 m, 23 Oct 1985 (fl bud), *H. van der Werff et al.* 7535 (PORT), 24 Oct 1985 (fl bud), *H. van der Werff et al.* 7576 (MO, PORT).

Schefflera vanderwerffii bears a superficial resemblance to *S. pittieri*, especially with respect to the size, shape, and texture of its leaves. The new species differs from *S. pittieri*, however, in having a shorter, more congested inflorescence (ca. 10–12.5 versus 20–40 cm long), larger fruit (6 mm versus 2–3 mm long), and fewer styles (5 versus 6–8). Huber (1977: 65), in his enumeration of the woody plants of Mérida and adjacent states, considered *S. pittieri* to be a synonym of *S. quinduensis* (Kunth) Harms, but as noted by Harms (1927: 300) the two differ in the size of their flowers and the number of styles; 6–8 in the former species, 8–10 in the latter. In addition, *S. pittieri* appears to be a local endemic confined to the Cordillera de la Costa of Venezuela, while *S. quinduensis* is currently known only from the Andes of Colombia and Ecuador.

Schefflera vanderwerffii might be more closely related to *S. quinquestylorum* Steyerf., which is found in the Venezuelan Guayana (Bolívar state) and adjacent Guyana. Here, too, the size, shape, and texture of the leaves are similar as is the number of styles, and shape of the fruit (see Frodin 1997, fig. 11). *Schefflera quinquestylorum*, however, has a much longer (19–20 cm long), less divided inflorescence and the style branches in fruit are completely free from the base.

We believe that *Schefflera vanderwerffii* is andromonoecious as are many species of Araliaceae. There are clearly two floral morphs. Our description of the flowers, however, is based solely on staminate ones as among the limited flowering material available to us for analysis (two collections in bud) we found only flowers with well-developed anthers and vestigial styles and ovaries. The well-developed styles in the one fruiting collection available for our study strongly suggest that there are also bisexual flowers.

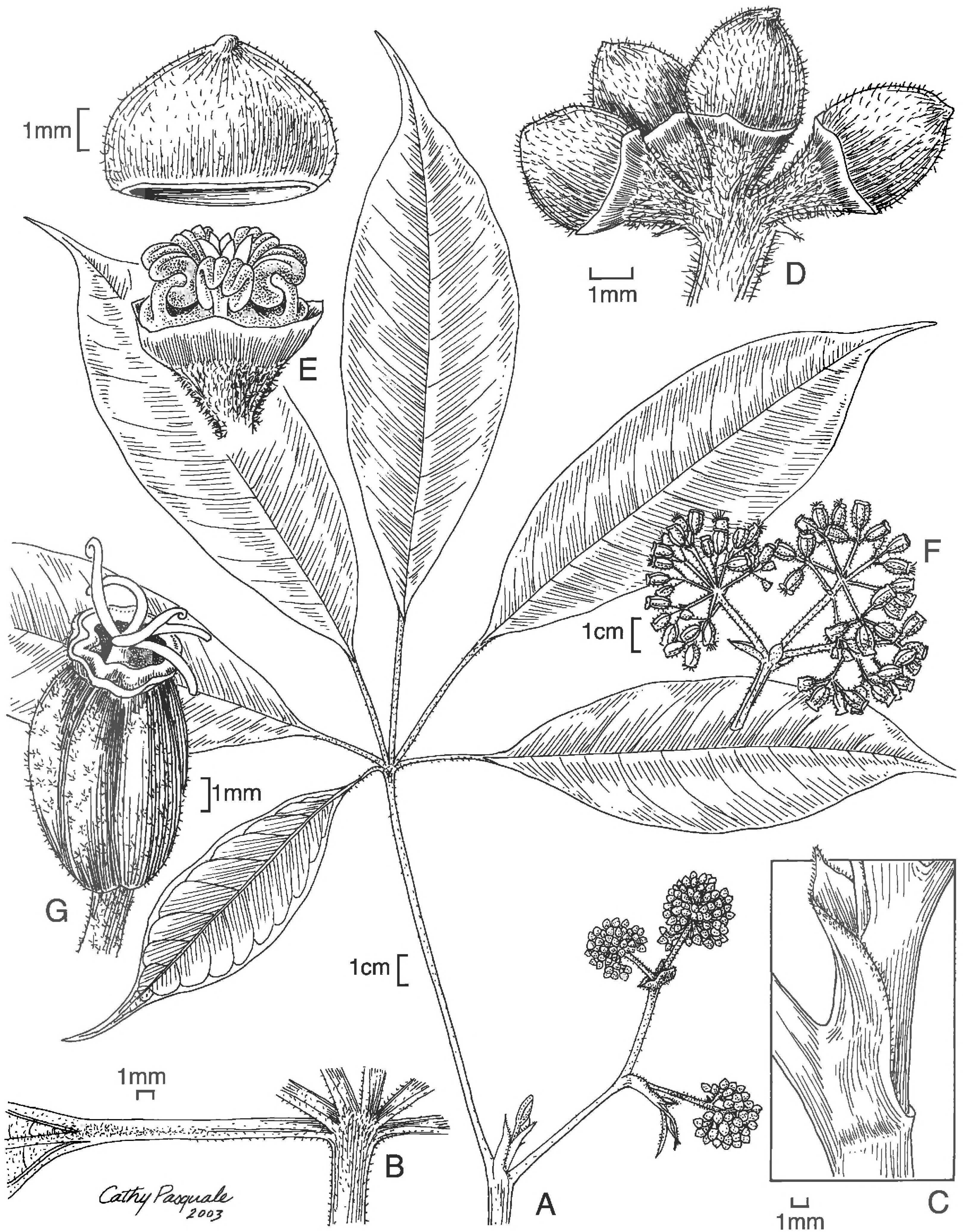


FIG. 1. *Schefflera vanderwerffii* Dorr & Stergios. A. Leaf and immature inflorescence. B. Insertion of petiolules. C. Stipular ligule. D. Immature umbel (ultimate ramification of inflorescence). E. Staminate flower bud with calyptrate corolla removed to show insertion of anthers and vestigial style branches. F. Inflorescence. G. Fruit, showing ribs (probably an artifact of drying) and diverging style branches. (A–E, based on *van der Werff et al.* 7576, PORT; F, G, based on *Stergios et al.* 20271, US).

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